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The State of the Association

There is a provision in the Constitution of the United States that the President shall from time to time report on the state of the Union. Although there is no similar provision in the Constitution of the Association, a report on various aspects of its state has appeared in nearly every issue of the A.A.A.S. BULLETIN. Since the Association has been able to hold only one meeting in the past four years, these reports have pertained mostly to its membership, its publications, and its affiliated societies.

Three years from now, on September 25, 1948, the Association will have completed the first hundred years of its existence. Obviously it should prepare for a great meeting in that year, partly because it is customary to hold celebrations on centennial anniversaries but much more because of the immense opportunities opening before scientists and the correspondingly great responsibilities that will rest upon them. At such a meeting the Association might well define anew its general objectives and formulate plans for attaining them. Committees on plans for the meeting and celebration should be appointed in the near future. In preparation for this proposed undertaking, a brief survey of the past and a report on the present state of the Association is now presented.

Membership

The membership of the Association at the time of its first meeting in 1848 was 461. At the meeting a year later it had increased to 541. Beginning with 1850, the average membership by decades is given in the following table down to 1939, after which it is given by other periods.

Years	Average in Period	At End of Period
1850-1859	810	862
1860-1869	579	511
1870-1879	782	1,030
1880-1889	1,890	1,952
1890-1899	1,881	1,721
1900-1909	4,021	6,136
1910-1919	8,213	no record
1920-1929	13,751	18,462
1930-1939	18,909	20,195
1939-1940	21,067	21,067
1940-1944	23,277	25,487
1945 (Apr. 1)	27,053

As measured by membership, there have been several fairly distinct periods in the life of the Association. During the first 31 years, from 1848 to 1879, the membership was fairly constant at about 1,000. Then for 20 years, from 1880 to 1899, it was also nearly constant at about 1,800. The period from 1900 to the beginning of the World War was one of rapid expansion in science and in membership of the Association, and the increase was even more rapid in the decade from 1920 to 1929, when the membership of the Association exceeded 18,000. During the following decade it stood nearly constant, but increased rapidly again after 1940.

Affiliated and Associated Societies

At present 103 scientific societies and 36 academies of science are affiliated with the Association and elect 204 representatives on its Council. The Association itself elects 52 members of the Council, its supreme governing body. In addition to the affiliated societies and academies, there are 51 associated societies without representation on the Council.

Affiliated and associated societies pay no entrance fees or dues to the Association. They are invited to meet with the Association, either jointly with the sections or independently, as they may prefer. In either case the Association announces their programs in *Science*, includes their programs in its General Program, provides rooms and facilities for their meetings without charge, and publishes abstract reports of their meetings in *Science*. As a rule, from 40 to 50 affiliated and associated societies join with the

Association at its annual meetings and make it necessary to have at least 60 meeting rooms with seating capacities ranging from about 75 up to 500 or even higher. At the Philadelphia meeting in 1940 a total of 222 scientific sessions were held and more than 2,100 addresses and papers were presented.

Since the total membership of the Association and its affiliated and associated societies, including duplicates, exceeds 500,000, the voice of the Association in a very real sense is the voice of American science. For this reason it issues official statements on questions of general interest only after thorough investigation and consideration.

Meetings of the Association

In the 97 years of its existence the Association has held 111 meetings and the Pacific and Southwestern Divisions have held 27 and 22 meetings, respectively.

The records of meetings of the Association from 1848 until 1866 do not contain detailed statistics of the attendance of scientists nor of the number of papers and addresses that were presented. From 1866 to 1940 the statistics are complete as follows:

<i>Years</i>	<i>Addresses and Papers</i>
1866-1870	597
1871-1880	1,395
1881-1890	2,231
1891-1900	2,567
1901-1910	3,386
1911-1920	8,004
1921-1930	13,579
1931-1940	16,378
1866-1940	48,137

In addition to the foregoing, in the 20 years between 1920 and 1940 more than 7,600 addresses and papers were presented at the meetings of the Pacific and Southwestern Divisions of the Association. These statistics, as impressive as they are, only partially measure the rapidly increasing scientific activity in the United States in recent decades. They indicate, for example, that twice as much scientific work has been done in this country since the close of World War I as was done in all its previous history.

The Association Symposium Publications

In 1938 the Association published "Tuberculosis and Leprosy," the first of a series of volumes based mostly on symposia presented at its meetings, or at its Gibson Island research conferences. Only those have been published that measured up to certain high standards defined by the Executive Committee and the manuscripts of

which were completed. Nineteen symposium volumes have so far appeared, one is in press, and the manuscript of another is being edited for printing. The symposium volumes are 7½ by 10½ inches, double column, illustrated, thoroughly documented, and cloth bound.

As of December 31, 1944, the total cost of manufacturing, advertising, and mailing the symposium volumes had been \$47,733.19, the receipts from sales had been \$57,173.49, leaving a balance for future publications of \$9,440.30. Up to December 31, 1944, a total of 20,194 copies of symposium volumes had been sold, all of which except the earlier ones were shipped from the Office of the Permanent Secretary. More than 500 scientists have contributed to these volumes which comprise 3,835 pages.

It is fortunate that before the outbreak of the war the Association established the policy of publishing its symposia of high order of merit, for these undertakings have enabled it to contribute very greatly to our war effort even though meetings could not be held. The symposium on Human Malaria, a comprehensive volume of 406 pages, was published in 1941, only a few months before the United States became directly involved in the war. Over 3,000 copies of this book have been sold, a large fraction of which were ordered directly by the Government or indirectly for the use of our armed forces in the tropics and in every other region where malaria is present. The contributors to this book include Brigadier General James S. Simmons, M.D., Colonel Charles F. Craig, M.D., seven members of the staff of the U. S. Public Health Service, eight members of the staff of the International Health Division of the Rockefeller Foundation, and prominent members of the faculties of such universities as Johns Hopkins, Tulane, Chicago, Rutgers, and Cornell. Volumes on Relapsing Fever, Mental Health, Chemical Control of Insects, and Aerobiology have also been of great value in protecting the health of our armed forces.

The remaining symposium volumes are on subjects not of special importance in time of war. They include, for example, volumes on Tuberculosis and Leprosy, Blood, Heart and Circulation, Surface Chemistry, Genetics of Pathogenic Organisms, and Fluorine and Dental Health. The Association's symposia have won gratifying approval of scientists in their respective fields not only in this country but in many other countries.

This enterprise is an illustration of the service the Association can render to science by vigorous action.

The Association's Journals

The Association has three serial publications, the monthly A.A.A.S. BULLETIN, *The Scientific Monthly*, and *Science*. The first was started in 1942 to make it possible to communicate easily and cheaply with all members of the Association and to publish informal items of interest about the Association. About 40 percent of the members of the Association receive *The Scientific Monthly* with their memberships and about 60 percent receive *Science*, but less than 8 percent receive both publications. Consequently before the BULLETIN was started it was necessary to publish the same notice in both the other journals in order to reach all members. The cost of the BULLETIN, aside from editing, is less than 15 cents per member per year.

As is well known, the late Dr. J. McKeen Cattell acquired *Science* in 1895 and it became "the official organ" of the Association in 1900, each member receiving it free with his membership. In 1915 members were permitted to take *The Scientific Monthly* instead of *Science* under the same conditions. From 1900 to 1920 the annual dues of members of the Association were \$3, of which \$2 went to Dr. Cattell in payment for *Science* or *The Scientific Monthly*. Beginning with 1920 the annual dues were increased to \$5, of which \$3 was paid for the member's journal.

In 1925 Dr. Cattell entered into an agreement with the Association under which *Science* should become the property of the Association after his death subject to the payment of an annuity to Mrs. Cattell. In 1937 a similar agreement was entered into with respect to *The Scientific Monthly*. These agreements were united and clarified in 1938 and titles to the journals were transferred to the Association at that time. Under the terms of the agreement the Association was obligated to pay to Mrs. Cattell and Dr. Cattell's estate an annuity for ten years equal to half the average annual profits from the publication of the journals for the preceding five years, subject to an increase in proportion to the inflation, if any, relative to the price index in 1938. Subject to possible change after audit of the books of The Science Press and The Science Press Printing Company, names under which Dr. Cattell's business was conducted, the payment by the Association to Mrs. Cattell and Dr. Cattell's estate at the present level of inflation is about \$22,400 per year.

In recent years the circulations of *Science* and *The Scientific Monthly* have steadily increased, as is shown in the following table:

Year	<i>Science</i>	<i>Scientific Monthly</i>
1930	13,337	9,208
1935	12,606	7,323
1940	14,423	8,972
1945 (Apr. 1)	19,037	13,462

The rapid increase in the circulation of both journals has made it necessary to reduce the weight of paper used in order to keep within the Association's quota.

Finances of the Association

The finances of the Association will be briefly summarized, reserving details for publication in *Science* after the books of the Association shall have been audited.

The "permanent funds" of the Association are under the control of the Treasurer, and income from them is used mainly in support of research, for providing emeritus memberships, and for providing journals for life members. The permanent funds have been derived from gifts and from life membership fees. On December 31, 1944, the book value of the portfolio of the Treasurer was \$243,720 and its market value was a little greater. Total assets, including about \$35,000 in cash, were a little over \$279,000. The Chairman of the Finance Committee, Mr. Frederick P. H. Siddons, Vice President and Secretary of the American Security and Trust Company, Washington, recently submitted the portfolio of the Association to the Personal Trust Department of the Chemical Bank and Trust Company, New York. The reply contained the following statement: "We have compared your portfolio with a number of endowment funds under our supervision and find that the high quality of the securities and conservative proportions of the list make favorable comparison with accounts of a similar nature."

The operations of the Association are under the Office of the Permanent Secretary. Until the acquisition of *The Scientific Monthly* in 1943 and *Science* in 1944, almost the only source of income was dues of members, in 1942 amounting to \$110,605. The largest expense was subscriptions for *Science* and *The Scientific Monthly*, a total of \$66,709 in 1942. The next largest item was salaries of the staff (8 persons) of the Office of the Permanent Secretary, \$20,895 in 1942.

The cumulative balance from operations of the Office of the Permanent Secretary from the founding of the Association in 1848 down to 1936 was only \$11,304. By 1942 it had increased to \$34,779. The operations since 1942 are not comparable because the editing and publishing

of *The Scientific Monthly* were taken over in 1943, and of *Science* in 1944. The publication of these journals added to the expense and to the income of the Association. In addition to the operating expenses, the annuities payable under the agreement between Dr. Cattell and the Association for the purchase of *Science* and *The Scientific Monthly* have been paid out of the operating balance of the Office of the Permanent Secretary. In the case of *The Scientific Monthly*, instead of paying the annuity over a period of 10 years, as provided in the agreement, the entire amount, \$9,500, was paid in 1943. At the close of the year the operating balance was \$29,482.

The annuity for *Science* presents a more serious problem, for, as has been stated, at the present level of inflation it amounts to about \$22,400 per year. However, the publication of *Science* is profitable, largely because of advertising which is now at a higher level than it has ever been in the past. Since *Science* came to the Association upon the death of Dr. Cattell on January 20, 1944, conclusions can now be drawn on the basis of a year's experience. During 1944 the Association paid to Mrs. Cattell and Dr. Cattell's estate \$19,676 in adjustment of the subscriptions for *Science* to July 1, under the terms of the agreement between Dr. Cattell and the Association. This item is nonrecurring. In addition, the Association paid to Mrs. Cattell and Dr. Cattell's estate \$17,000, the amount of the annuity for the period from January 20 to December 31, 1944, but not including the inflation payment which became due and payable only after the close of the year and the determination of the inflation by the Bureau of Labor Statistics. After paying the operating expenses of the Office of the Permanent Secretary, the non-recurring item of \$19,676, and the annuity of \$17,000, the cumulative balance of the Office of the Permanent Secretary on December 31, 1944, was \$44,486.

Operations for the first three months of this year provide a basis for forecasting the financial condition of the Association on December 31, 1945. There are two nonrecurring items this year, the cost of the suit of Mr. Ware Cattell against the Association and the audit of the books of The Science Press and The Science Press Printing Company in order to determine precisely the amount of the annuity from the Association to Mrs. Cattell and Dr. Cattell's estate. These non-recurring items will probably amount to about \$10,000. After paying these nonrecurring items, the annuity of about \$22,400, and the operating expenses, it is estimated that the cumulative bal-

ance of the Office of the Permanent Secretary on December 31, 1945, will be about \$44,000.

But the Association must not limit its vision to the remaining months of this year nor its program merely to surviving. It must promptly formulate its mission and before its hundredth anniversary in 1948 have a home of its own in which to fulfill it.—F.R.M.

Programs of the 1945 A.A.A.S.-Gibson Island Conferences on Nutrition and Cancer

Food and Nutrition (Week of July 16)

R. J. BLOCK, *Chairman*; F. L. GUNDERSON, *Vice Chairman*.

Clinical Aspects of Protein Nutrition. F. Co Tui. Discussion to be led by S. C. Madden.

Biochemical Aspects of Nutritional Studies of the Aged. M. K. Horwitt.

The Food Clinic in Nutrition. Frederick J. Stare. Subject to be announced later. A foreign speaker.

A Review of the Methionin-Choline-Betaine Situation. H. J. Almquist. Discussion to be led by Thomas Jukes.

Energy Interrelationship Between Carbohydrates, Fats and Proteins in Practical Nutrition. E. B. Forbes.

Animal and Poultry Nutrition. James C. Fritz. Discussion to be led by H. N. Brockelsby.

The Rate of Enzymic Digestion of Protein as a Factor in Nutrition. Bernard L. Oser.

The Use of Lactic Acid Bacteria in the Study of Amino Acids. E. E. Snell.

Review of the high points of the conference, under the chairmanship of Dr. Frank Gunderson.

Cancer (Week of July 30)

DEAN BURK, *Chairman*; J. T. BITTNER, *Vice Chairman*

The Role of Nutrition in the Formation of Tumors. Albert Tannenbaum.

The Influence of Diet upon the Production of Tumors of the Liver. Eugene L. Opie.

Significance of Pituitary-Adrenal Cortical Secretion in the Normal and Pathological Physiology of Lymphoid Tissue. T. F. Dougherty and Abraham White.

The Chemistry of the Substances Specific for the Stimulation of Lymphopoiesis and Myelopoiesis. D. L. Turner and F. R. Miller.

A Myeloid Metaplasia Factor from Human Urine. Hans Hirschmann, Robert W. Heinle, and Joseph T. Wearn.

General Review of Therapy, Past and Present. Wm. H. Woglom.

The Transparent-Chamber Technique as a Tool in the Study of Therapeutic Agents. Glenn H. Algire.

Report on the Therapeutic Index for Cancer. Helen M. Dyer.

Androgenic and Antiandrogenic Substances in the Treatment of Cancer. Charles B. Huggins.

The Treatment of Blood Dyscrasias, Lymphomas, and other Malignant Disease with Radioactive Phosphorus: Experimental and Clinical. E. H. Reinhard and N. A. Womack.

Chemotherapeutic Regression of Malignant Mouse Tumors. R. Lewisohn, D. Laszlo, C. Leuchtenberger, and R. Leuchtenberger.

A Study of 300 Purified Compounds on the Growth of Grafts of Tumors. Margaret Reed Lewis.

A Method of Producing Oncolysis in Rats that Conferred Immunity on the Majority of the Treated Animals from Tumors Originated in the Same Strain. Paul Aptekman.

Some Aspects of a Joint Institutional Research Program on Chemotherapy. Current Laboratory and Clinical Experiments with Bacterial Polysaccharide and with Synthetic Compounds. M. J. Shear, J. L. Hartwell, A. J. Dalton, I. C. Diller, J. Royle, A. L. Holloman, R. Oakey, C. W. Rees, T. S. Hauschka, T. B. Dunn, and S. P. Reimann.

Accommodations at the conference quarters are limited in number, and requests for registration should be sent to Dr. Neil Gordon, Chemistry Department, Wayne University, Detroit 1, Michigan, as detailed earlier in *Chemical and Engineering News*, 23, 182, Jan. 25, 1945, and in *A.A.A.S. BULLETIN*, 4, 13, February, 1945. Attendance is determined by application in order, and is non-invitational except for listed speakers. A waiting list will be maintained.

Ware Cattell vs. A. A. A. S. Settled for \$7,500 by Consent Judgment

On July 12, 1943, Ware Cattell was dismissed by the Executive Committee of the American Association for the Advancement of Science from his position as Editor of *The Scientific Monthly*. Mr. Cattell brought suit alleging breach of contract, asking damages for the remaining three and one-half years of that contract in the amount of \$17,500.

The case came on to trial on January 8, 1945. Mr. Cattell testified on his own behalf and rested his case. The following officers testified on behalf of the Association: Dr. Isaiah Bowman, President in 1943; Dr. Otis W. Caldwell, General Secretary; Mr. Sam Woodley, Assistant Secretary. The Captain of the Guard of the Smithsonian Institution also testified.

On the fourth day of the trial, settlement negotiations were initiated. Following several conferences among the Court, the parties and their counsel, a settlement was agreed upon whereby the Court awarded a consent judgment to Mr. Cattell in the amount of \$7,500.

It was part of the agreement between the Association and Mr. Cattell that Mr. Cattell waived all further legal claims with reference to his dismissal as Editor of *The Scientific Monthly*.

The following Stipulation of Settlement was entered in the cause:

It is hereby stipulated by and between the parties to this action, by their attorneys, that this action be finally settled upon the following basis:

1. That in full payment, settlement and discharge of all claims and damages, actions and causes of action for, upon, or by reason of any damages, costs, expenses and compensation which have been or which hereafter may be sustained by the plaintiff, Ware Cattell, on account of or in any way growing out of it, resulting from or to result from any acts or actions of the defendant corporation, American Association for the Advancement of Science, or any of its officers, agents, servants or employees, to the date of the execution of this Stipulation of Settlement, intending to include herein among all other claims and demands, actions and causes of action, all claims and demands, actions and causes of action for, upon or by reason of the act and actions of the defendant corporation, American Association for the Advancement of Science, and any of its officers, agents, servants and employees, in the matter of the termination as of July 12, 1943, of the appointment of the plaintiff, Ware Cattell, as Editor of *The Scientific Monthly*, and in all other employment capacities whatsoever, and in full settlement, payment and discharge of this action, Civil Action No. 21,508, the defendant, American Association for the Advancement of Science, agrees to pay the plaintiff, Ware Cattell, the sum of Seven Thousand Five Hundred Dollars (\$7,500.00).

2. That the parties hereto consent that the Court enter judgment in the above-entitled action, in the sum of Seven Thousand Five Hundred Dollars (\$7,500.00), in favor of the plaintiff, Ware Cattell, against the Association, for the aforesaid sum of Seven Thousand Five Hundred Dollars (\$7,500.00), without interest and without costs.

(s) DAVID A. FEGAN
Attorney for the
plaintiff, Ware Cattell.

(s) WARREN E. MAGEE
Attorney for the
defendant, American Association
for the Advancement of Science.

The foregoing Stipulation of Settlement in the above-entitled action, Civil Action No. 21,508, is hereby approved, and the Clerk of this Court shall, and he is hereby directed, to enter judgment pursuant to the terms of this Stipulation of Settlement, in favor of the plaintiff, Ware Cattell, and against the defendant, American Association for the Advancement of Science, for the aforesaid sum of Seven Thousand Five Hundred Dollars (\$7,500.00), without interest and without costs.

(s) T. ALAN GOLDSBOROUGH
JUSTICE.

Dated this 15th day of January, 1945.

Ordering Symposium Volumes

In the month from March 9 to April 9 a total of 989 symposium volumes were mailed to purchasers from the Office of the Permanent Secretary. Obviously these shipments cost a good

deal of time. Members of the Association can reduce the time substantially by enclosing checks with their orders, for unless checks are enclosed the accounts must be entered on the books of the Association and the purchasers must later be billed, sometimes more than once. The difficulties under present conditions of filling purchase orders with reasonable promptness are so great that members of the Association are earnestly requested to send checks with their orders for symposium volumes and for extra copies of *Science* and *The Scientific Monthly*.

Federal-State Relations in Education

Education is certainly one of the most important problems before the United States today. Its objectives should be defined anew, methods of attaining them should be formulated, and policies for their financial support should be adopted. A very notable report on the last of these problems, the financial support of education, has just been issued, jointly, by the Committee on Problems and Policies, of the American Council on Education, and by the Educational Policies Commission, appointed by the National Education Association of the United States and the American Association of School Administrators.

It would be difficult to get a group of educators more competent to make a report on the financing of public education in this country than the members of commissions mentioned. They include President Edmund E. Day, of Cornell University, President James B. Conant, of Harvard University, President Harold W. Dodd, of Princeton University, Dean W. F. Russell, of Teachers College, Columbia University, President William E. Wickenden, of Case School of Applied Science, Dr. Willard E. Givens, Secretary of the National Educational Association, President George F. Zook, American Council on Education, and other educators of the highest standing.

These commissions issued a 47-page report, including a "Summary" of 3½ pages from which the following paragraphs are taken:

It is the mature conclusion of the Commissions responsible for the issuance of this report that a continuance of recent and current trends in federal-state relations in education, will within a measurable period of time, transfer predominant responsibility for the control of education in the United States from the states and localities to the national government. This could happen not because the people want it, but in default of action to prevent it. . . .

Adequate organization for the provision of a fair educational opportunity for all children and youth will

require some participation of the federal government in education. The experience of a hundred and fifty years of national life, the compulsion of modern social demands, and the probable character of the period which lies ahead, all testify that federal participation in education in the United States is a permanent phenomenon. Federal participation in education is no longer a debate. It has become a fact.

The issue which still has to be settled is: Can federal participation in education be kept within proper bounds and limits, or will it eventually swallow up all education in a system of centralized control and administration?

The basic control of education can be kept in the states and localities, with the federal government assisting in the development of this service but refraining from dominating it, provided the issues involved in federal-state relations in education are clearly understood and provided sound principles are formulated and observed in guiding the evolution of this important relationship.

A decentralized pattern of educational control and administration can be preserved in this country provided we recognize that education is a matter of primary concern in our great industrial democracy, and see to it that basic control of this important service is kept close to the people in unified state organizations, rather than scattering its control between various levels of government and various departments of the federal government. . . .

The United States Government needs a clear-cut policy to define its relations to education. The chief elements of such a policy are (1) federal grants to assure an adequate financial basis for education everywhere in the nation, (2) distribution of the federal grants on an objective basis which leaves the control of educational processes to the states and localities, and (3) well-organized federal advisory and informational services and leadership concerning education. Such a policy would provide the educational program that this nation must have for its own safety and for the well-being of its citizens.

The Torrey Botanical Club

The Torrey Botanical Club originated spontaneously and informally among a group of men who were interested in the study and identification of plants. They gathered at intervals in the herbarium of Columbia College, under the leadership and inspiration of the scholarly, genial, modest, and wholly lovable Dr. John Torrey. Dr. Torrey was for many years Professor of Chemistry and Botany at the New York College of Physicians and Surgeons and at Columbia; also Professor of Chemistry at Princeton, New York State Botanist, and in his later years, Assayer for the United States Government. With all these varied pursuits, mostly carried on simultaneously, he was at heart a botanist. He published very extensively on the Flora of North America, both alone and in collaboration with his assistant, associate, and distinguished disciple, Asa Gray.

Because of the informal meetings of the New York botanists with Dr. Torrey and their frequent sorties into the field, it is impossible to set any exact date for the origin of the Torrey Botanical Club. It has been variously given as 1858, 1865, and 1866; the

early members met for supper on the snowy night of December 20, 1867, to celebrate the semicentennial of the presentation by Dr. Torrey of his "Catalogue of plants growing spontaneously within thirty miles of the City of New York" to the Lyceum of Natural History. It is definitely known that there were meetings before this. The seventy-fifth anniversary of the occasion of 1867 was celebrated in June, 1942, as the Seventy-fifth Anniversary of the Torrey Botanical Club.

The first list of members was published in 1870 and includes 30 names. The organization was incorporated in 1872, the year before Torrey's death, under the name of the Torrey Botanical Club.

This same group, augmented by other workers during the next three decades, took an active part in securing the establishment of the New York Botanical Garden in the City of New York near the turn of the century. The Columbia College herbarium, including Torrey's valuable collections, was incorporated in that institution, and Dr. N. L. Britton, Professor of Botany at Columbia University, faithful member and generous benefactor of the Club, was the first Director of the New York Botanical Garden.

The *Bulletin of the Torrey Botanical Club* was started as a personal enterprise by William H. Leggett in 1870 and was taken over 12 years later by the Club, "to form a medium of communication for all those interested in the Flora of this vicinity" (City of New York). The editor went on to say, in the prefatory remarks of the first issue, that "while the *Bulletin* will be chiefly devoted to the local Flora of New York, it will not exclude matters of general Botanical interest." This was the first botanical periodical in America. Although it was originally devoted to taxonomic and collector's notes, especially for the metropolitan area, it soon broadened to a much wider scope. This journal, which is now in its seventy-second volume, still includes articles on taxonomy—with most of the earth replacing the original City of New York radius—but in addition it embraces the results of research on all the phases of botany—morphology, physiology, cytology, genetics, phytogeography, et al. The first volume was issued in 12 installments and totaled 48 pages; the volume for 1944, issued in six numbers, embraces 680 pages; its contributors are widely scattered geographically. Many of its members feel that the publication of the *Bulletin* has been the most significant contribution that the Club, as an organization, has made to the furthering of botanical science through the years.

In 1901 a need was felt for an additional medium of expression, to care for briefer articles, for discourses of a more popular nature, and for news items. With these features in mind, a new monthly journal, *Torreyia*, was started in that year. In 1902, the growing pains of the *Bulletin* were further relieved by transferring the publication of the proceedings and minutes of the Club to *Torreyia*. This journal, which is now in its forty-fifth year, has continued to

serve these purposes, and to carry accounts of the field trips of the Club.

In addition to these two journals, which appear regularly, the Club has since 1889 been publishing *Memoirs*. These are for the most part longer, often highly technical contributions, that cannot conveniently be included in its own or in other periodicals. The *Memoirs*, which appear irregularly and are now in their twentieth volume, each volume being composed of several numbers, thus serve to care for the publication of articles that are valuable but that cannot easily be printed otherwise.

Since 1886 the *Bulletin* has contained, as one of its features, an index to contemporary American botanical literature. American is used here in the broadest sense of the term, and this is a comprehensive bibliography of current publications in American botany. This index is now classified under the headings of Plant Taxonomy and Floristics, Morphology, Plant Physiology, etc. Since 1900 these titles have been published by the Club on cards, so that a card index to American botanical literature is available to libraries. For six years previously such cards had been put out, from the titles in the *Bulletin*, by the Cambridge Botanical Supply Company. In all, more than seventy thousand cards, each with its title and citation, have been published to date, and they form a valuable and usable guide to the botanical literature of the New World.

It is evident, from its publication of the *Bulletin of the Torrey Botanical Club*, of *Torreyia*, of *Memoirs*, and of Index Cards, that the Torrey Botanical Club has through the years borne a heavy burden of responsibility in spreading the gospel of scientific truth.

The Torrey Botanical Club was founded by field botanists. It has always had—as it always will—members who feel that they gain both pleasure and profit from seeing and studying plants in their native habitats, preferably with soft earth underfoot and sunlight filtering through a mosaic of green leaves overhead. In the "old days" field trips were held especially on Saturdays; in recent years they have been conducted on Sundays as well, though there have always been longer, "week-end" excursions, some even several weeks in length. For some 80 years these trips have served the purpose of supplying information on the local flora, and of building an herbarium of such plants—now deposited at the New York Botanical Garden. Strange as it may seem, there are still, within one day's journey from the City of New York, areas that warrant and will well repay more thorough investigation from this standpoint.

A "Field Schedule" is published each year in which these excursions are listed and described; the localities vary from year to year, depending upon conditions and available modes of travel. Because of the war, this phase of the Club's activity is necessarily more circumscribed at present than for some seasons past, but the Field Schedule for 1945 has been prepared. The members who take part in these excursions have always been faithful and enthusiastic, and

some of the most outstanding botanists in the United States, such as N. L. Britton, R. A. Harper, C. C. Curtis, and M. A. Howe, have served as "leaders."

For many years, "indoor" meetings were held once a month, but since the autumn of 1888 there have been two each month. One of these takes place on the first Tuesday evening; the other on the third Wednesday afternoon of each month, from October to May, inclusive. Since 1933 most of the business of the Club has been conducted by a council of elected members, so that the meetings are devoted largely to the presentation of scientific programs. In recent years the meetings have been held at the New York Botanical Garden, the American Museum of Natural History, Columbia University, the Brooklyn Botanic Garden, the Boyce Thompson Institute for Plant Research, Fordham University, and Hunter College.

From a published membership of 30 in 1870, the roster of the Torrey Botanical Club has grown, so that it now contains some 800 names; there are approximately 400 additional subscriptions to the *Bulletin* alone—mostly institutional libraries. The early members were from the metropolitan area; every continent is now represented.

The Torrey Botanical Club is affiliated with the American Association for the Advancement of Science and with the New York Academy of Sciences.

Membership is open to all persons interested in botany. There are four classes of membership: Life (at \$100.00), Sustaining (at \$15.00 a year), Annual (at \$5.00 a year), and Associate (at \$2.00 a year). Members in the first three classes may attend the meetings, take part in the business, and receive all the publications except the *Memoirs*, which are offered to them at a special rate; associate members may attend the meetings and field trips, and they receive the Schedule of Field Trips and the *Bulletin of the New York Academy of Sciences*.

At the time of preparation of this account several scores of the Club's members are serving in the armed forces; others have been active in Mexico, in Central America, in South America, and in the islands of the Caribbean, studying the growth, distribution, planting, raising, etc., of rubber and drug plants and of other plants that are at present of vital importance.

Since plants know no national boundaries, a botanical club is rather happily adapted to foster a spirit of friendship and good will. For a number of years the Torrey Botanical Club has made a conscious effort to promote such feelings, especially with South and Central America, and it is distinctly proud that some 50 of its members are from our sister republics to the south.

The Torrey Botanical Club originated about 80 years ago, among a group of men who had a common interest at heart—the study of plants. Viewpoints have changed, methods of studying plants have changed, botanical science has become progressively more microscopical, more experimental, and more chemical. Its members, however, still have the common bond of their botanical grandfathers—interest in the study of plants.—EDWIN B. MATZKE.

Membership in the Association

Eligibility for Membership

Membership in the Association is open to all persons engaged in scientific work, whether in the fields of the natural or the social sciences; to all amateur scientists, whatever their special interests; and to all who desire to follow the advances of science and its effects upon civilization. Members having made substantial contributions to the advancement of science are eligible for election as fellows.

Dues and Publications

Membership dues are \$5 per year, including subscriptions for the monthly A.A.A.S. BULLETIN and either the weekly journal *Science*, now in its 101st volume, or *The Scientific Monthly*, now in its 60th volume. *Science* is a journal for professional scientists; the *Monthly* is a nontechnical journal for the intelligent public. The Association also publishes technical symposia and nontechnical books on science that are available for members at prices substantially below those to the public.

Organization and Meetings

The Association was founded in 1848, with an initial membership of 461. Papers in its early programs were classified as either natural philosophy or natural history. Now its work is organized under 16 sections and 190 associated societies having a total membership of over 500,000. Its annual meetings are the greatest regular gatherings of scientists in the world.

Nominations and Applications for Membership

Members may submit nominations for membership at any time, and persons desiring to become members can obtain membership application forms from the Office of the Permanent Secretary, the Smithsonian Institution Building, Washington 25, D. C.

Changes of Address

New addresses for the Association's record and for mailing the journals *Science* and *The Scientific Monthly*, as well as the A.A.A.S. BULLETIN, should be in the Office of the Permanent Secretary, Washington 25, D. C., at least two weeks in advance of the date when the change is to become effective.

Officers of the Association

President, Charles F. Kettering; *Permanent Secretary*, F. R. Moulton; *General Secretary*, Otis W. Caldwell; *Treasurer*, W. E. Wrather.

Executive Committee: Anton J. Carlson, *Chairman*; Roger Adams, Otis W. Caldwell, Arthur H. Compton, Charles F. Kettering, Burton E. Livingston, Kirtley F. Mather, Walter R. Miles, F. R. Moulton, Elvin C. Stakman, and W. E. Wrather.

